U.S.S.R. COMPUTATIONAL MATHEMATICS AND MATHEMATICAL PHYSICS

Cover-to-cover translation of
Zhurnal vychislitel'noi matematiki i matematicheskoi fiziki

LIST OF CONTENTS AND AUTHOR INDEX
VOLUME 23, 1983

VOL.
23
1983

PERGAMON PRESS
OXFORD · NEW YORK · TORONTO · SYDNEY · PARIS · FRANKFURT

U.S.S.R. COMPUTATIONAL MATHEMATICS AND MATHEMATICAL PHYSICS

Cover-to-cover translation of
Zhurnal vychislitel'noi matematiki i matematicheskoi fiziki
Russian Original Copyright
Nauka, 90 Profsoyuznaya ul. Moscow 117485
Published bi-monthly by Pergamon Press

HONORARY EDITORIAL ADVISORY BOARD

R. A. BROOKER (*Manchester*)
L. FOX (*Oxford*)
D. C. GILLES (*Glasgow*)
A. S. HOUSEHOLDER (*Oak Ridge*)
G. F. J. TEMPLE (*Oxford*)
A. THOM (*Oxford*)
J. H. WILKINSON (*N.P.L., Teddington*)

Scientific Translation Editor:
R. C. GLASS, M.A., M.Sc.,
The City University, St. John Street, London, E.C.1.

Translators: D. E. BROWN and W. CHRZCZONOWICZ

Publishing and Advertising Office:
Pergamon Press Ltd., Headington Hill Hall, Oxford, OX3 0BW

Subscription Rates
1985 *Subscription rate* $625.00 (*including postage and insurance*)
Two year rate (1985/1986) $1187.50
Subscriptions are only serviced after payment has been received and are not accepted for less than one year.

Subscription enquiries from customers in America should be sent to:
Pergamon Press Inc., Maxwell House, Fairview Park, Elmsford, NY 10523, *U.S.A.,*
and for the remainder of the world to:
*Pergamon Press Ltd., Headington Hill Hall, Oxford OX*3 0*BW, U.K.*

Microform Subscriptions and Back Issues
Back issues of all previously published volumes are availabe in the regular editions and on microfilm and microfiche.
Current subscriptions are available on microfiche simultaneously with the paper edition and on microfilm on completion of the annual index at the end of the subscription year.

Copyright © 1985 Pergamon Press Ltd.

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, electrostatic, magnetic tape, mechanical, photocopying, recording or otherwise, without permission in writing from the copyright holder.

U.S. COPYRIGHT LAW APPLICABLE TO USERS IN THE U.S.A.

Photocopying information for users in the U.S.A.: The Item-Fee Code for this publication indicates that authorization to photocopy items for internal or personal use is granted by the copyright holder for libraries and other users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service provided the stated fee for copying beyond that permitted by Section 107 or 108 of the United States Copyright Law is paid. The appropriate remittance of $10.00 per copy per article is paid directly to the Copyright Clearance Center Inc., 21 Congress Street, Salem, MA 01970. The copyright owner's consent does not extend to copying for general distribution, for promotion for creating new works, or for resale. Specific written permission must be obtained from the publisher for such copying. In case of doubt please contact your nearest Pergamon office.
The Item-Fee Code for this publication is: 0041 5553/83 $10.00 + .00

PUBLISHED BY

PERGAMON PRESS LTD

OXFORD · NEW YORK · TORONTO · SYDNEY · PARIS · FRANKFURT

VOL
23
198

VOLUME CONTENTS

VOL. 23, No. 1 1983

I. N. Vysotskaya and R. G. Strongin	1	A method of solving non-linear equations, using *a priori* probability estimates of the roots
Yu. M. Kaniovskii	8	Behaviour in the limit of iterations of the stochastic two-step method
A. I. Koryakin	14	Estimation of a function from randomized observations
A. P. Torokhtii	20	On mesh-class-optimal methods of computing quadratures
A. A. Levikov	27	Duality relations for the convex optimal control problem
E. Diurkovich	35	Numerical determination with given accuracy of the optimal response time of a system
V. M. Panin and B. N. Pshenichnyi	42	A parametric method of linearization in mathematical programming problems
S. V. Smelyakov and Yu. G. Stoyan	50	Modelling of the space of paths in problems of constructing optimal trajectories
V. G. Kiselev	56	Approximation of probability constraints in some production planning problems
I. A. Tikhonov	64	On a converse problem for a non-linear differential equation
N. V. Muzylev	69	On the uniqueness of the simultaneous determination of thermal conductivity and volume heat capacity
V. A. Galaktionov	74	Criticality conditions and comparison theorems for difference solutions of non-linear parabolic equations
O. M. Belotserkovskii, V. G. Grudnitskii and Yu. A. Prokhorchuk	81	Difference scheme of second-order of accuracy on the minimal pattern for hyperbolic equations
V. V. Varlamov	87	Diffraction of internal waves in a stratified liquid at a semi-infinite wall
V. A. Lyul'ka	92	Variation of the resistance of a tube when a viscous liquid containing solid bodies flows through it: the Fareus–Lindquist effect
A. P. Golub'	97	A numerical method of solving the radiation transfer equation in one-dimensional problems of radiation gas dynamics
E. S. Andreev, M. Yu. Kozmanov and E. B. Rachilov	104	The maximum principle for a system of equations of energy and non-stationary radiation transfer
V. V. Vyshinskii	110	Calculation of space transonic flow past oblong bodies
S. M. Deshpande	117	The statistical particle-in-cell method for multicomponent gases
V. L. Matrosov	123	Pair isomorphism of permissible objects in recognition problems
A. F. Mukhamedgaliev	128	Construction of a correct taxonomy algorithm in expansions of the A class of recognition algorithms
S. I. Kashkevich and V. V. Krasnoproshin	133	The stability of a model of recognition algorithms
A. S. Dzyuba	138	The algebraic closure of a family of separated algorithms

VOL. 23 1983

A. V. SERZHANTOV — 144 An optimal deciphering algorithm for some classes of monotonic functions

Short Communications

KH.D. IKRAMOV — 149 Duality relations associated with Gaussian elimination

A. B. BAKUSHINSKII — 152 An asymptotic relation for the iteratively regularized Newton–Kantorovich method

V. N. KRUTIKOV — 154 On the rate of convergence of the minimization method along vectors in a given directional system

V. G. VASIL'EV — 156 An estimate of the errors of the approximate solution of the integral Fredholm equation of the first kind

I. E. SHPARLINSKII — 158 On one property of a multiplicative transducer of pseudo-random numbers

N. S. VASIL'EV — 160 Numerical methods for a class of problems of optimal flow control on graphs

A. A. SUKHANOV — 164 A method of solving two-point boundary value problems

O. V. SERDYUK and A. P. SOLODUKHIN — 168 A method of computing the natural frequencies and fields of resonators and waveguides

N. E. MANAEVA — 170 An axisymmetrical problem of the theory of elasticity for a transversally-isotropic non-homogeneous half-space

A. YU. DEM'YANOV and A. V. PANASENKO — 175 Application of the build-up to solve non-stationary self-similar problems of boundary layer theory

R. G. DAUTOV, E. V. ERMOLIN and A. M. MOKEEV — 178 The influence of mathematical viscosity on the difference solution in problems of two-temperature gas dynamics

Scientific Information

181 The All-Union School for Young Scientists: 'Theoretical and Applied Problems of Computational Mathematics and Mathematical Physics'

VOL
23
198

VOL. 23, NO. 2 1983

1 Svyatoslav Sergeevich Lavrov celebrates his sixtieth birthday

N. N. REDKOVSKII — 2 A numerical method of solving systems of non-linear equations by curvilinear descent

I. A. GLINKIN — 6 Optimal algorithms for integrating convex functions

B. I. KVASOV — 13 Parabolic B-splines in interpolation problems

I. A. RUMYANTSEV — 20 A local interpolation curve with a given degree of smoothness, preserving a fixed sign of curvature

V. B. GLASKO and E. E. KONDORSKAYA — 27 On some Tikhonov-stabilizing functionals for multi-dimensional ill-posed problems

N. S. VASIL'EV — 31 Methods of finding the global minimum of a quasi-concave function

A. I. GOLIKOV and V. G. ZHADAN — 36 Two modifications of the linearization method in non-linear programming

V. G. MATSENKO and V. N. RUBANOVSKII — 45 The Lyapunov direct method for analyzing the dynamics of the age structure of biological populations

V. G. MAZ'YA, S. A. NAZAROV and V. A. PLAMENEVSKII — 50 Evaluation of the asymptotic form of the "intensity coefficients" on approaching corner or conical points

S. A. VOLOSHIN — 59 On a class of implicit finite-difference schemes

I. P. GAVRILYUK, R. D. LAZAROV, V. L. MAKAROV and S. I. PIRNAZAROV — 64 Estimates of the rate of convergence of difference schemes for fourth-order elliptic equations

K. K. SABEL'FEL'D — 71 The sweeping and averaging principle when constructing Monte Carlo method algorithms for solving boundary value problems

G. G. ELENIN, S. P. KURDYUMOV and A. A. SAMARSKII — 80 Non-stationary dissipative structures in a non-linear heat-conducting medium

G. T. GOLOVIN — 87 Numerical solution of the self-consistent problem of the transport of several electron beams

A. A. AKHMONEN and G. A. TYURIN — 92 The method of orthogonal polynomials in linear transport theory

V. G. GRUDNITSKII and V. N. RYGALIN — 102 Calculations of gas flow in the energy-release zone in a cylindrical explosion

A. L. DORFMAN — 109 Numerical solution of the equations of the dynamics of a viscous incompressible fluid with dispersed particles

A. V. BABAKOV — 115 Application of flow theory to a problem of the dynamics of a viscous stratified fluid

S. A. ABRAMOV — 120 Analysis of programs and binary relations

V. L. MATROSOV — 128 On the incompleteness of a model of algorithms for computing estimates

I. V. ISAEV — 137 Synthesis of a correct recognition algorithm as a minimal covering construction problem

Short Communications

V. V. VOEVODIN — 143 The question of non-self-adjoint extension of the conjugate gradients method is closed

I. P. RYAZANTSEVA — 145 On the solution of variational inequalities with monotonic operators by the regularization method

B. B. POKHODZEI — 149 Tabular methods of modelling discrete distributions

A. A. ZHIGLYAVSKII — 153 Modelling the tail of a normal distribution

V. V. ZAKHAROV and A. I. KORYAKIN — 157 On realizations of an approximation random quadrature formula

KH. R. ISMATOVA — 161 Approximate method of calculating optimal values of threshold parameters in algorithms for computing estimates

I. M. ISRAILOV — 163 On a model of estimate-computing algorithms

Scientific Information

166 Book Review

VOL. 23 1983

VOL. 23, NO. 3 1983

V. I. GRYN — 1 Stability of the recurrence determination of matrix elements generated by products of orthogonal polynomials

V. A. KURCHATOV — 8 Optimization of methods of difference linearizations in the case of inaccurate input data

R. A. SHAFIEV — 14 On regular methods of evaluating L-pseudo-inverse operators

L. A. ONEGOV — 20 On a best quadrature formula and its application for evaluating singular integrals with a Cauchy kernel

G. A. MIKHAILOV — 28 Approximate models of stochastic processes and fields

O. F. BORISENKO and L. I. MINCHENKO — 34 On the directional differentiability of a maximum function

M. G. KREINES and N. M. NOVIKOVA — 39 An algorithm for solving a class of discrete multicriterion problems

V. N. NEFEDOV — 47 Evaluation of the conditional minimum of a function with given accuracy

NGUYEN VAN THOAI and HOANG TUY — 55 Solving the linear complementarity problem through concave programming

G. I. SHISHKIN — 59 — A difference scheme on a non-uniform mesh for a differential equation with a small parameter in the highest derivative

A. I. ZADORIN and V. N. IGNAT'EV — 66 — On the numerical solution of equations with a small parameter in the highest derivative

N. B. KONYUKHOVA — 72 — Singular Cauchy problems for systems of ordinary differential equations

V. A. GALAKTIONOV and A. A. SAMARSKII — 83 — Difference solutions of a class of quasilinear parabolic equations—I

C. E. ROMANOVA — 92 — An economic method for the approximate solution of Laplace's difference equation in rectangular regions

A. E. KOROLEV and V. E. YANITSKII — 102 — Direct statistical simulation of collisional relaxation in mixtures of gases with a large difference in concentrations

V. B. GLASKO, A. N. TIKHONOV, M. K. TRUBETSKOV and I. N. SHLYAROV — 106 — Mathematical modelling of a production process

P. P. VOLOSEVICH, N. A. DAR'IN and E. I. LEVANOV — 113 — The problem of a piston moving in a gas with energy sources

A. T. BERLYAND and S. A. SHCHENNIKOV — 119 — Singularities of the numerical solution of gas-dynamic problems with many interacting discontinuities

S. I. VASILENKO — 125 — A problem in scheduling theory

M. B. AIDARKHANOV — 129 — The solution of recognition problems with information given by the enumeration of domains

Short Communications

A. M. DENISOV — 136 — An approximate solution of operator equations of the first kind

YU. K. SIRENKO — 138 — On the possibility of an analytic solution of some classical problems of diffraction theory

YU. A. EREMIN and A. G. SVESHNIKOV — 142 — Substantiation of the method of non-orthogonal series and the solution of some converse problems in diffraction

A. G. VASIL'KOV, YU. K. DANILEIKO, T. P. LEBEDEVA and M. F. ROMANOV — 146 — An explicit method for the numerical solution of the problem of the propagation of a light wave in non-linear media

V. I. IVANOV, N. N. SYSOEV and F. V. SHUGAEV — 151 — Regular non-stationary reflection of a plane shock wave from a blunt body

YU. A. ZUEV and V. N. TRISHIN — 155 — The lower bound of the number of inequalities which represent a monotonic Boolean function of n variables

N. N. BRUSHLINSKAYA, M. P. DOROFEEVA, B. P. OVSYANKIN and V. M. SHPENEV — 156 — A problem of organizing data processing on a computer

159 — Symposium on Mathematical Problems of Chemical Kinetics and Combustion

VOL. 23, NO. 4 — 1983

A. V. BABIN — 1 — An iterative method directly applicable to differential equations

N. F. TRUSKOVA — 10 — Polyspheroidal periodic functions

V. L. BURKOVSKAYA and V. L. MAKAROV — 18 — Applicability of the mesh method of straight lines for solving a class of optimal control problems

N. B. KONYUKHOVA — 23 — On admissible boundary conditions at an irregular singular point for systems of linear ordinary differential equations

V. M. BELOKONOV, I. V. BELOKONOV and YU. M. ZABOLOTNOV — 36 — Fast computer evaluation of a non-linear oscillatory system

V. A. GALAKTIONOV and A. A. SAMARSKII — 40 — On difference solutions of a class of quasi-linear parabolic equations

S. Kh. Dzhu Magazieva — 45 Numerical study of a partial differential equation

V. I. Kopchenov and A. N. Kraiko — 50 A monotonic second-order difference scheme for hyperbolic systems with two independent variables

I. V. Otroshchenko and R. P. Fedorenko — 57 A relaxation method for solving a biharmonic difference equation

M. Dryya — 64 On an efficient algorithm for a Dirichlet variational difference problem

U. Langer — 69 Iterative solution of some schemes of the finite element method for elliptic equations of order $2n$, $n \geqslant 1$

S. V. Sivashinskii — 77 Difference schemes of projection type for symmetric systems of first-order equations

V. I. Pinchukov — 83 A scheme for solving the equations of a viscous heat-conducting gas

A. I. Zuev and N. G. Karlykhanov — 88 A method of solving the equations of radiative-conductive heat transfer

N. G. Volkov and T. I. Savelova — 96 An ill-posed problem of crystal physics

A. G. Sveshnikov, A. V. Tikhonravov and S. A. Yanshin — 100 The synthesis of optical coatings in the case of oblique incidence of light

V. A. Gasilov, T. K. Korshiya, B. Ya. Lyubimov, V. F. Tishkin, A. P. Favorskii and M. Yu. Shaskov — 104 Application of the parallel-chord method to solve implicit difference equations of magnetohydrodynamics

V. I. Timoshenko — 111 Numerical determination of the parameters in a highly entropic layer on bodies with slight blunting in a supersonic flow

A. M. Bishaev and V. A. Rykov — 116 The H-theorem and Onsager principle for the stationary Boltzmann's equation

A. V. Kondrashenko — 123 The use of piecewise exponential functions in transport theory

E. N. Gordeev, V. K. Leont'ev and I. Kh. Sigal — 128 Computational algorithms for finding the radius of stability in problems of choice

Sh. U. Bekirov — 132 A correct model of recognition algorithms of bounded capacity, based on the concept of potential

Short Communications

Kh. D. Ikramov — 138 On the growth of off-diagonal matrix elements in bordering methods

N. M. Ivanov and V. P. Muzychenko — 139 An economic version of numerical Laplace inversion

Kh. M. Gamzaev and M. A. Tairov — 141 Analysis of the optimal control of oil expulsion by water

A. S. Makarenko and M. N. Moskal'kov — 145 Accuracy and dispersion of difference schemes

I. M. Gaisinskii — 148 A recurrence algorithm for solving infinite sets of linear differential equations with a triangular matrix

V. G. Grudnitskii and V. N. Podobryaev — 152 Interaction of a shock wave with a cylindrical resonator

A. R. Ashurov — 155 A recognition algorithm with extended training information

VOL. 23, NO. 5 CONTENTS 1983

O. P. Burdakov — 1 Stable versions of the secants method for solving systems of equations

A. L. Ageev — 11 A regular algorithm for finding the basis of the kernel of a linear operator

S. A. Ashmanov — 18 An algebraic approach to the proof of turnpike theorems

VOL. 23 1983

A. Ya. Dubovitskii and V. A. Dubovitskii	23	Numerical integration of the ordinary differential equations of non-isothermal kinetics using slow combinations
V. A. Galaktionov	31	On the global unsolvability of Cauchy problems for quasilinear parabolic equations
M. M. Karchevskii	41	Some methods of solving the first boundary value problem for the biharmonic difference equation
G. P. Panasenko	48	Averaging of processes in frame constructions with random properties
E. I. Tikhomirova	55	Solution of some non-linear evolutionary equations with boundary degeneration
N. A. Tikhonov	59	On the various mechanisms that generate a diffusion effect in the case of salt transport in soil
D. A. Shulaya	65	The linear equation of multivelocity transport theory
A. G. Sveshnikov and S. A. Yakunin	76	Mathematical modelling of non-stationary processes in plasma-optical systems
A. S. Zapreev and V. A. Tsetsokho	86	Some inverse problems of oscillation theory
N. V. Ardelyan	93	The convergence of difference schemes for two-dimensional equations of acoustics and Maxwell's equations
M. I. Volchinskaya, V. I. Mazhukin, B. N. Chetverushkin and N. G. Churbanova	99	Solution of two-dimensional non-stationary problems of the dynamics of a radiating gas
V. M. Kovenya and S. G. Chernyi	105	The marching method for solving simplified stationary Navier–Stokes equations
Yu. Ya. Mikhailov	113	Notes on the stability of a non-linear scheme for calculating the motion of a shock wave
A. P. Skotnikov, V. P. Skotnikov and V. N. Fomin	117	Calculation of the flows past blunt bodies taking radiation into account
N. A. Solov'ev	122	On complete conditional tests for tables with separated blocks of ones
		Short Communications
S. P. Voskoboinikov, Yu. B. Senichenkov and I. A. Tsukerman	131	The rate of convergence of the two-step gradient descent method
S. N. Kukudzhanov	133	On optimal approximations in the eigenvalue problem for the Ritz and Bubnov–Galerkin methods
E. L. Amromin and V. A. Bushkovskii	136	Application of linear programming to non-linear problems with free boundaries for Laplace's equation
I. E. Mikhailov	139	Numerical solution of the three-dimensional analogue of Goursat's problem
A. A. Charakhch'yan	141	A modification of Godunov's scheme with Euler variables
V. M. Goloviznin and O. G. Simacheva	144	A method of constructing computational meshes in domains with curvilinear boundaries
K. A. Volosov and I. A. Fedotov	147	Asymptotic form of solution of quasilinear parabolic equation in neighbourhood of front
Hoang Dinh Dung	151	On the solution of an Oseen flow problem
G. V. Voskresenskii, E. A. Galst'yan and S. M. Zhurav	153	Comparison of methods for solving the diffraction problem for a step in a waveguide
B. P. Ovsyankin	157	A problem of data processing organization in multiprocessor computing systems
A. N. Sokolov	160	Partial decoding of monotonic Boolean functions

VOL
23
198

VOL. 23, NO. 6 CONTENTS 1983

G. M. VAINIKKO 1 The critical level of discrepancy in regularization methods

I. V. KOCHIKOV, A. N. MATVIENKO and A. G. YAGOLA 10 A modification of the generalized discrepancy principle

V. A. PUPKOV 14 On an isolated eigenvalue of a matrix and the structure of the corresponding eigenvector

F. MIRZOAKHMEDOV and S. P. URYAS'EV 20 Adaptive step adjustment for a stochastic optimization algorithm

V. N. NEFEDOV 27 On regularization of lexicographic problems by the method of minimum concessions

V. A. GALAKTIONOV 36 Conditions for global non-existence and localization of solutions of the Cauchy problem for a class of non-linear parabolic equations

S. I. MUKHIN, S. B. POPOV and YU. P. POPOV 45 On difference schemes with artificial dispersion

E. I. TIKHOMIROVA 54 On the convergence of Rothe's scheme for some non-linear equations of evolution with singularities

YU. K. SIRENKO 61 On a proof of the method of semi-inversion of matrix operators in diffraction problems

YU. V. SHESTOPALOV 67 The discrete spectrum of natural waves of a screened open slot line

S. T. TOLMACHEV 75 A doubly periodic problem of magnetostatics

E. V. BULYCHEV, V. B. GLASKO and S. M. FEDOROV 80 Restoration of the initial temperature from surface measurements

I. V. ARDELYAN 84 On the use of iterative methods when realizing implicit difference schemes of two-dimensional magnetohydrodynamics

G. T. GOLOVIN 90 A method of calculating the stationary motion of relativistic electron beams in coaxial vacuum lines

V. S. GALKIN and N. K. MAKASHEV 99 Conditions for the applicability and molecular–kinetic derivation of the equations of multitemperature multivelocity gas dynamics

YU. N. GRIGOR'EV and A. N. MIKHALITSYN 105 A spectral method of solving Boltzmann's kinetic equation numerically

D. B. VOLKOV 112 Asymptotic expansion for solutions for Stokes' system of equations and the system of the theory of elasticity in domains of special type

L. S. KLABUKOVA 120 On the differential operator of problems of the theory of momentless elastic shells with negative Gaussian curvature

A. E. DYUSEMBAEV 126 The synthesis of correct algorithms in the closure of recognition algorithms with representative samples and systems of supporting sets

Short Communications

G. I. MALOSHONOK 133 Solution of a system of linear equations in an integral ring

A. S. IL'INSKII and Z. Z. SITSHAEVA 136 The stability of the incomplete Galerkin method in problems of wave diffraction at a bounded body

V. N. KOSHPARENOK, P. N. MELEZHIK, A. E. POEDINCHUK and V. P. SHESTOPALOV 140 The rigorous solution of the two-dimensional problem of diffraction by a finite number of curvilinear screens

O. YU. BABAEVA and B. N. CHETVERUSHKIN 144 Radiation in two-dimensional problems of radiative gas dynamics

A. A. RAINES 148 A conservative algorithm for solving the Boltzmann equation for a mixture of gases

V. I. ZUBOV, V. M. KRIVTSOV, I. N. NAUMOVA and YU. D. SHMYGLEVSKII 150 Calculation of the effect of a laser on a flat barrier and its vapour

VOL. 23 1983

VOL
23
198

AUTHOR INDEX

Abramov, S.A. 120(2)
Ageev, A.L. 11(5)
Aidarkhanov, M.B. 129(3)
Akhmonen, A.A. 92(2)
Amromin, E.L. 136(5)*
Andreev, E.S. 104(1)
Ardelyan, I.V. 84(6)
Ardelyan, N.V. 93(5)
Ashmanov, S.A. 19(5)
Ashurov, A.R. 155(4)*

Babaeva, O.Yu. 144(6)*
Babakov, A.V. 115(2)
Bakushinskii, A.B. 152(1)*
Bekirov, Sh.V. 132(4)
Belokonov, I.V. 36(4)
Belokonov, V.M. 36(4)
Belotserkovskii, O.M. 81(1)
Berlyand, A.T. 119(3)
Bishaev, A.M. 116(4)
Borisenko, O.F. 34(3)
Brushlinskaya, N.N. 156(3)*
Bulychev, E.V. 80(6)
Burdakov, O.P. 1(5)
Burkovskaya, V.L. 18(4)
Bushkovskii, V.A. 136(5)*

Charakhch'yan, A.A. 141(5)*
Chernyi, S.G. 105(5)
Chetverushkin, B.N. 99(5), 144(6)*
Churbanova, N.G. 99(5)

Danileiko, Yu.K. 146(3)*
Dar'in, N.A. 113(3)
Dautov, R.G. 178(1)*
Dem'yanou, A.Yu. 175(1)*
Denisov, A.M. 136(3)*
Deshpande, S.M. 117(1)
Diurkovich, E. 35(1)
Dorfman, A.L. 109(2)
Dorofeeva, M.P. 156(3)*
Dryya, M. 64(4)
Dubovitskii, A.Ya. 23(5)
Dubovitskii, V.A. 23(5)
Dyusembaev, A.A. 126(6)
Dzhu Magazieva, S.Kh. 45(4)
Dzyuba, A.S. 138(1)

Elenin, G.G. 80(2)
Eremin, Yu.A. 142(3)*
Ermolin, E.V. 178(1)*

Favorskii, A.P. 104(4)
Fedorenko, R.P. 57(4)
Fedorov, S.M. 80(6)
Fedotov, I.A. 147(5)*
Fomin, V.N. 117(5)

Gaisinskii, I.M. 148(4)*
Galaktionov, V.A. 74(1), 83(3), 40(4), 31(5), 36(6)
Galkin, V.S. 99(6)
Galst'yan, E.A. 153(5)*
Gamzaev, Kh.M. 141(4)*
Gasilov, V.A. 104(4)
Gavrilyuk, I.P. 64(2)
Glasko, V.B. 27(2), 106(3), 80(6)
Glinkin, I.A. 6(2)
Golikov, A.I. 36(2)
Golovin, G.T. 87(2), 90(6)
Golovizнin, V.M. 144(5)*
Golub', A.P. 97(1)
Gordeev, E.N. 128(4)
Grigor'ev, Yu.N. 105(6)
Grudnitskii, V.G. 81(1), 102(2), 152(4)*
Gryn, V.I. 1(3)

Hoang Dinh Dung, 151(5)*
Hoang Tuy, 55(3)

Ignat'ev, V.N. 66(3)
Ikramou, Kh.D. 149(1)*, 138(4)*
Il'inskii, A.S. 136(6)*
Isaev, I.V. 137(2)
Ismatova, Kh.R. 161(2)*
Israilov, I.M. 163(2)*
Ivanov, N.M. 139(4)*
Ivanov, V.I. 151(3)*

Kaniovskii, Yu.M. 8(1)
Karchevskii, M.M. 41(5)
Karlykhanov, N.G. 88(4)
Kashkevich, S.I. 133(1)
Kiselev, V.G 56(1)
Klabukova, L.S. 120(6)
Kochikov, I.V. 10(6)
Kondorskaya, E.E. 27(2)
Kondrashenko, A.V. 123(4)
Konyukhova, N.B. 72(3), 23(4)
Kopchenov, V.I. 50(4)
Korolev, A.E. 102(3)
Korshiya, T.K. 104(4)
Koryakin, A.I. 14(1), 157(2)*
Koshparenok, V.N. 140(6)*
Kovenya, V.M. 105(5)
Kozmanov, M.Yu. 104(1)
Kraiko, A.N. 50(4)
Krasnoproshin, V.V. 133(1)
Kreines, M.G. 39(3)
Krivtsov, V.M. 150(6)*
Krutikov, V.N. 154(1)*
Kukudzhanov, S.N. 133(5)*
Kurchatov, V.A. 8(3)
Kurdyumov, S.P. 80(2)
Kvasov, B.I. 13(2)

Langer, U. 69(4)
Lazarov, R.D. 64(2)
Lebedeva, T.P. 146(3)*
Leont'ev, V.K. 128(4)
Levanov, E.I. 113(3)
Levikov, A.A. 27(1)
Lyubimov, B.Ya. 104(4)
Lyul'ka, V.A. 92(1)

Makarenko, A.S. 145(4)*
Makarov, V.L. 64(2), 18(4)
Makashev, N.K. 99(6)
Malashonok, G.I. 133(6)*
Manaeva, N.E. 170(1)*
Matrosov, V.L. 123(1), 128(2)
Matsenko, V.G. 45(2)
Matvienko, A.N. 10(1)
Mazhukin, V.I. 99(5)
Maz'ya, V.G. 50(2)
Melezhik, P.N. 140(6)*
Mikhailov, G.A. 28(3)
Mikhailov, I.E. 139(5)*
Mikhailov, Yu.Ya. 113(5)
Mikhalitsyn, A.N. 105(6)
Minchenko, L.I. 34(3)
Mirzoakhmedov, F. 20(6)
Mokeev, A.M. 178(1)*
Moskal'kov, M.N. 145(4)*
Mukhamedgaliev, A.F. 128(1)
Mukhin, S.I. 45(6)
Muzychenko, V.P. 139(4)*
Muzylev, N.V. 69(1)

Naumova, I.N. 150(6)*
Nazarov, S.A. 50(2)
Nefedov, V.N. 47(3), 27(6)
Nguyen van Thoai, 55(3)
Novikoua, N.M. 39(3)

Onegov, L.A. 20(3)
Otroshchenko, I.V. 57(4)
Ovsyankin, B.P. 156(3)*, 157(5)*

Panasenko, A.V. 175(1)*
Panasenko, G.P. 48(5)
Panin, V.M. 42(1)
Pinchukov, V.I. 83(4)
Pirnazarov, S.I. 64(2)
Plamenevskii, V.A. 50(2)
Podobryaev, V.N. 152(4)*
Poedinchuk, A.E. 140(6)*
Pokhodzei, B.B. 149(2)*
Prokhorchuk, Yu.A. 81(1)
Pshenichnyi, B.N. 42(1)
Pupkov, V.A. 14(6)

Rachilov, E.B. 104(1)
Raines, A.A. 148(6)*
Redkovskii, N.N 2(2)
Romanou, M.F. 146(3)*
Romanova, C.E. 92(3)
Rubanovskii, V.N. 45(2)
Rumyantsev, I.A. 20(2)
Ryazantseva, I.P. 145(2)*
Rygalin, V.N. 102(2)
Rykov, V.A. 116(4)

OL.
23
983

Sabel'fel'd, K.K. 71(2)
Samarskii, A.A. 80(2), 83(3), 40(4)
Savelova, T.I. 96(4)
Senichenkov, Yu.B. 131(5)*
Serdyuk, O.V. 168(1)*
Serzhantov, A.V. 144(1)
Shafiev, R.A. 14(3)
Shaskov, M.Yu. 104(4)
Shchennikov, S.A. 119(3)
Shestopalov, V.P. 140(6)*
Shestopalov, Yu.V. 67(6)
Shishkin, G.I. 59(3)
Shlyarou, I.N. 106(3)
Shmyglevskii, Yu.D. 150(6)*
Shparlinskii, I.E. 158(1)*
Shpenev, V.M. 156(3)*
Shugaev, F.V. 151(3)*
Shulaya, D.A. 65(5)
Sigal, I.Kh. 128(4)
Simacheva, O.G. 144(5)*
Sirenko, Yu.K. 138(3)*, 61(6)
Sitshaeva, Z.Z. 136(6)*
Sivashinskii, S.V. 77(4)
Skotnikov, A.P. 117(5)
Skotnikov, V.P. 117(5)
Smelyakov, S.V. 50(1)
Sokolov, A.N. 160(5)*
Solov'ev, N.A 122(5)
Soludukhin, A.P. 168(1)*
Stoyan, Yu.G. 50(1)
Strongin, R.G. 18(1)
Sukhanov, A.A. 164(1)*
Sveshnikov, A.G. 142(3)*, 100(4), 76(5)
Sysoev, N.N. 151(3)*

Tairov, M.A. 141(4)*
Tikhomirova, E.I. 55(5), 54(6)
Tikhonov, A.N. 106(3)
Tikhonov, I.A. 64(1)
Tikhonov, N.A. 59(5)
Tikhonravov, A.A. 100(4)
Timoshenko, V.I. 111(4)
Tishkin, V.F. 104(4)
Tolmachev, S.T. 75(6)
Torokhtii, A.P. 20(1)
Trishin, U.N. 155(3)*
Trubetskov, M.K. 106(3)
Truskova, N.F. 10(4)
Tsetsokho, V.A. 86(5)
Tsukerman, I.A. 131(5)*
Tyurin, G.A. 92(2)

Uryas'ev, S.P. 20(6)

Vainikko, G.M. 1(6)
Varlamou, V.U. 87(1)
Vasilenko, S.I. 125(3)
Vasil'ev, N.S. 160(1)*, 31(2)
Vasil'ev, V.G. 156(1)*
Vasil'kov, A.G. 146(3)*
Voevodin, V.V. 143(2)*
Volchinskaya, M.I. 99(5)
Volkov, D.B. 112(6)
Volkov, N.G. 96(4)
Volosevich, P.P. 113(3)
Voloshin, S.A. 59(2)
Volosov, K.A. 147(5)*
Voskoboinikov, S.P. 131(5)*
Voskresenskii, G.V. 153(5)*
Vyshinskii, V.V. 110(1)
Vysotskaya, I.N. 1(1)

Yagola, A.G. 10(6)
Yakunin, S.A. 76(5)
Yanitskii, V.E. 102(3)
Yanshin, S.A. 100(4)

Zabolotnov, Yu.M. 36(4)
Zadorin, A.I. 66(3)
Zakharov, V.V. 157(2)*
Zapreev, A.S. 86(5)
Zhadan, V.G. 36(2)
Zhiglyavskii, A.A. 153(2)*
Zhurav, S.M. 153(5)*
Zubov, V.i. 150(6)*
Zuev, A.I. 88(4)
Zuev, Yu.A. 155(3)*

VOL.
23
198

OL.
23
983